

Instructions Version 1
Rev. 1-28-2019

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RINEHART
R A C I N G

INSTALLATION INSTRUCTIONS

Rinehart Racing 4" Catalyst Mufflers & MotoPro45 Catalyst Mufflers for Slimline Duals Exhaust System Packages for 2017-2019 Harley-Davidson Touring Models

Thank you for buying a Rinehart Racing® exhaust system. We are committed to providing premium products that with proper installation and care will last for many years to come. Please be sure to read the instructions fully and inspect all components of your new system before installation. If you need help removing your stock mufflers and/or head pipes, or how to install the Rinehart Racing exhaust system you should seek the advice and/or skill of a professional mechanic. Please keep all OEM parts as some may be used for the installation of the Rinehart Racing® exhaust system. If you are installing the system and are not the owner, please return these instructions to the owner as they contain important information that may be required at a later date. If you have questions pertaining to the installation, please contact our technical service department: 828-350-7653 or customerservice@rineharttracing.com

Rinehart Racing 4" Catalyst Mufflers & MotoPro45 Catalyst Mufflers for Slimline Duals Exhaust System Packages are exempt from emissions tampering regulations for the models indicated below under the applicable Executive Order issued by the Air Resources Board for the State of California (CARB)

CARB EXECUTIVE ORDER # *****

2017-2019 Harley Davidson Touring Models equipped with 107, 114", and 117" engines.

SAFE INSTALLATION AND OPERATION RULES:

Before installing your Rinehart part, it is your responsibility to read and follow the installation and maintenance procedures in these instructions and follow the basic rules below for your personal safety.

- Gasoline is extremely flammable and explosive under certain conditions and toxic when breathed. Do not smoke or use an open flame around gasoline. Perform installation in a well-ventilated area away from open flames or sparks.
- If motorcycle has been running, wait until engine and exhaust pipes have cooled down to avoid getting burned before performing any installation steps.
- Before performing any installation steps, disconnect battery to eliminate potential sparks and inadvertent engagement of starter while working on electrical components.
- Read instructions thoroughly and carefully so all procedures are completely understood before performing any installation steps. Contact Rinehart Racing with any questions you may have if steps are unclear or any abnormalities occur during installation or operation of motorcycle with a Rinehart Racing part on it.
- Consult an appropriate service manual for your motorcycle for correct disassembly and reassembly procedures for any parts that need to be removed to facilitate installation.
- Use good judgment when performing installation and operating motorcycle. Good judgment begins with a clear head. Don't let alcohol, drugs, or fatigue impair your judgment. Start installation when you are fresh.
- Be sure all federal, state, and local laws are obeyed with the installation.
- For optimum performance and safety and to minimize potential damage to the motorcycle or the Rinehart Racing Exhaust System, use all mounting hardware that is provided and follow all installation instructions.
- Motorcycle exhaust fumes are toxic and poisonous and must not be breathed. Run motorcycle in a well-ventilated area where fumes can dissipate. Do not run the motorcycle or start the engine until the exhaust system has been fully assembled and installed. Failure to adhere to this may result in significant damage to the motorcycle.

Discoloration & Tuning:

Discoloration of exhaust is generally a result of fuel calibration tuning. In addition, discoloration can be the result of electrical issues or engine malfunction. Discoloration is not a warrantable item.

Emissions Notice:

The State of California does not permit the use of aftermarket exhaust systems that remove original equipment catalysts unless a California Air Resources Board (CARB) Executive Order has been issued. Exhaust systems that remove original equipment catalysts are legal in California for racing use only. Replacing a catalyst equipped exhaust system with a non-catalyst exhaust system on a registered vehicle in the State of California is illegal and may subject the parties involved (including but not limited to the owner, driver, consumer, mechanic and dealership) to fines and penalties and such action is strictly prohibited by Rinehart Racing®.

Return & Refund Policy:

No return of merchandise will be accepted without first securing a Return Merchandise Authorization ("RMA") number provided by Rinehart Racing. Buyer must submit, in writing, evidence of purchase date, copy of invoice indicating goods purchased, reason for return, exchange or refund, and RMA number. At its sole discretion, Rinehart Racing may accept or deny the claim for return, exchange or damage. If accepted and if the goods have not been used and are in a resalable condition, Company shall provide refund within 30 days of purchase; subject to a fifteen percent (15%) restocking fee. If the product has been installed, no refund, return or exchange shall be allowed. No refund, return or exchange is allowed after 45 days from the date of invoice. Buyer is responsible for return freight, and must include all original packaging, materials, manuals, hardware and copy of invoice. All products returned must be securely packed and delivered to Company in an undamaged condition. Rinehart Racing may refuse or reject returned product for failure to follow the conditions set forth herein.

Rinehart Racing® Limited Warranty For Catalyst-Equipped Products

SECTION 1 WARRANTY. BY PURCHASING OR ACCEPTING THE PRODUCT, THE BUYER ACKNOWLEDGES THAT THE LIMITATION OF LIABILITY IS PART OF THE TERMS OF SALE, CONSTITUTES A BINDING AGREEMENT, AND MAY BE ENFORCED AGAINST THE BUYER BY RINEHART. Any warranties, if separately provided in writing, are extended only to the Buyer whose name is shown on the Product invoice. Rinehart warrants, subject to the limitations identified in Section 2 of this "Warranty," that certain qualifying Rinehart products (individually "Product," and collectively "Products") shall be free from defects in materials and workmanship for a period of 2 (two) years from the date of original retail purchase. This warranty applies only to Product installed in the United States of America, Canada or Mexico ("North America").

SECTION 2 LIMITATIONS. This warranty shall apply exclusively to product that has been manufactured by Rinehart Racing after September 1, 2009. Product bearing the trademark "Rinehart" or "Rinehart Racing" that was manufactured prior to September 1, 2009, shall not be covered under or subject to this warranty due to the sole fact that it was not manufactured by Rinehart Racing. Product covered under this Warranty are subject to the following limitations:

2.1 Original Purchaser. The rights conferred by this Warranty are exercisable only by the original retail purchaser of Product returned as defective and are not transferable to any successor owner or other party.

2.2 Intended Use. This Warranty shall apply only to Products that have been properly installed on the original motorcycle or vehicle for which the Product was intended for use or installation by Rinehart, and to uninstalled Products. This Warranty shall not apply to Products that have been altered or modified in any way or have been repaired by any person or entity other than Rinehart. Furthermore, this Warranty shall not apply to Rinehart product that has not been installed pursuant to the recommended Rinehart installation instructions. Use of the product outside of its originally intended use, including but not limited to use in conjunction with any other aftermarket product or original equipment product not expressly authorized or recommended in writing by Rinehart, shall void this Warranty. Damage to a product caused by accident, misuse, abuse, or normal wear and tear, such as road grime or conditions, is not covered by this Warranty.

2.3 Repair, Replace or Refund. Rinehart shall have the right at its sole, absolute and unrestricted discretion to repair or replace any Product returned under the terms of this Warranty or, alternatively, to refund the original retail purchase price paid by the Customer (subject to verification of amount not to include applicable sales taxes, freight or handling charges) for such Product at any time. Any part that is repaired or replaced under this warranty will, itself, be warranted only for the remainder of the warranty period of the original product being repaired or replaced. Any warrantable product replaced will be done so with new or previously used product that is equivalent to new in both performance and reliability.

2.4 No Implied Warranties. RINEHART DISCLAIMS ANY WARRANTIES, EXPRESS OR IMPLIED, WHETHER OF MERCHANTABILITY OF FITNESS FOR A PARTICULAR USE, EXCEPT AS EXPRESSLY SET FORTH WITHIN THIS DOCUMENT. BUYER'S SOLE AND EXCLUSIVE REMEDY AND RINEHART RACING'S SOLE LIABILITY FOR LOSS OR DAMAGE ARISING FROM PURCHASE OR USE OF THE PRODUCT SHALL BE LIMITED TO REPAIR OR REPLACEMENT OF THE DEFECTIVE PART AT COMPANY'S SOLE DISCRETION. IN NO EVENT SHALL RINEHART BE LIABLE FOR ANY LOSS OF USE, REVENUES, OR ANTICIPATORY PROFIT, OR FOR ANY DIRECT, INDIRECT OR CONSEQUENTIAL DAMAGES ARISING OUT OF OR CONNECTED WITH THE SALE, USE, OPERATION, OR INABILITY TO USE OF PRODUCTS PURCHASED FROM RINEHART. THIS LIMITATION OF LIABILITY SHALL BE APPLICABLE TO ANY CLAIM PRESENTED, WHETHER THE LEGAL THEORY FORMING THE BASIS OF SUCH CLAIM INVOLVES CONTRACT, TORT, NEGLIGENCE, STRICT LIABILITY, STATUTE, REGULATION, CONSUMER PROTECTION LAWS OR OTHERWISE. Cost of, or associated with, removal and installation of Products are not included as part of this Warranty; buyer assumes sole responsibility for such removal and installation costs. This Warranty does not apply if any Product has been damaged by accident, abuse, misuse or misapplication.

2.5 Warranty Procedure. Products returned to Rinehart must be sent at the customer's sole expense along with adequate proof of purchase. The original purchase receipt or equivalent thereof shall qualify as adequate proof of purchase. Rinehart reserves the right to determine whether the customer has complied with, and thus met, the terms of this Warranty. In the event such terms have not been met, Rinehart shall be under no obligation to honor any claim under this Warranty. To submit a Warranty claim, the consumer must first call Rinehart technical support at (828) 350-7653 and receive a return merchandise authorization number ("RMA #"). Any defective Product must thereafter, in a reasonably prompt manner, be returned directly to Rinehart together with: (1) the original dated sales receipt (or reasonably acceptable equivalent); (2) the RMA # clearly written on the outside of the package; and (3) all mailing and/or freight charges prepaid. Rinehart replaces defective parts only, not the full system. If a part is determined to be defective and thereby covered under this warranty, however, the part or the applicable full system, has been discontinued and is no longer manufactured by Rinehart, then Rinehart reserves the right to credit the Buyer an amount equal to the last published Manufacturer's Suggested Retail Price (MSRP) towards another product or full system purchase. In the event of discontinued product, as described heretofore, Rinehart shall have no obligation to refund the original retail purchase price or the part's last published MSRP to Buyer. Rinehart Racing reserves the right to inspect all parts related to a warranty claim and to refuse any warranty claim upon inspection of said parts. Please note Rinehart accepts no responsibility for Products damaged in transit, so please pack carefully. Products shall be returned to the following address: RINEHART RACING Attn: Warranty Division 260 Rutledge Road Fletcher, NC 28732 2.6 Sound & Performance Not Warranted. Engine performance and sound vary from vehicle to vehicle and are directly affected by tuning, weather, engine displacement, cam timing and compression, and other factors outside the control of Rinehart. As such, the quality of sound, the noise level and the performance of an exhaust system will vary. Rinehart Racing does not warrant sound or performance.

2.6 Limited One (1) Year Ceramic Coating Warranty. Rinehart Racing warrants the black ceramic coating to be free from defects in materials and workmanship for a period of one (1) years from the date the product is purchased, subject to the limitations contained herein and as described in this limited warranty. Ceramic coatings are invariably produced from powders and contain variable particle size distributions. The coatings are applied by hand held sprayers and contain ceramics which may cause minor differences in the finish. Small flaws and/or marks or inclusions in the finish are customary for exhaust industry coatings and do not always constitute an issue covered by warranty or a flawed product. If upon inspection, you disagree, or, if the finish is very obviously flawed, please call us before you install the system. In the event of an alleged defect in the coating (such as peeling, chipping, flaking or rusting), follow the Warranty Procedure as identified in Section 2.5. Rinehart Racing is not liable for coatings that have been damaged due to abuse, neglect, adverse road and environment conditions, accident and improper installation, shows of evidence of adverse conditions such as high heat temperatures encountered during engine break in or dynamometer testing or under lean conditions. Coating damage usually occurs during the first engine run, specifically in dynamometer testing, when the exhaust temperatures exceed threshold heat levels exceeding normal riding conditions. Unusually high exhaust temperatures are normally caused by excessively lean or excessively rich air/fuel mixtures and/or incorrect ignition timing. For this reason, we strongly suggest that your technician uses an alternate set of headers and mufflers or remove your heat shields for dynamometer testing. This will mitigate the chances that you will damage the visual coating on the heat shields or void the warranty of your new ceramic coated exhaust. If your technician needs assistance with tuning or obtaining an alternative set of test headers, please direct the technician to call Rinehart Racing. While we cannot guarantee that a test set will always be available, we will do our best to accommodate and assist.

2.7 Chrome. Small flaws and/or marks in the nickel plating (commonly referred to as "chrome") do not always constitute an issue covered by warranty or a flawed product. If, upon inspection, the plating is very obviously flawed, do not install the product and follow the Warranty Procedure as described in Section 2.5. The nickel-chrome plating and finish on Rinehart Racing product is of the highest quality, but as with any nickel-chrome product directly exposed to atmospheric elements and road conditions, it must be maintained properly. Salt, sand, and humidity promote corrosion and are detrimental for plating. Riding a motorcycle in these conditions while failing to properly clean and dry the nickel plated parts, will result in increased oxidation, corrosion and the eventual appearance of rust. Under no circumstances should any abrasive cleaners or waxes be used on Rinehart product. Rinehart Racing reserves the right to determine if the product has been maintained properly and has not been abused. As engine exhaust is extremely hot, allowing items or substances to come into contact with the product under high temperature situations will result in melting, adhesion and/or staining onto the product. We strongly suggest that your dynamometer technician use an alternate set of headers and mufflers or remove your heat shields for dynamometer testing. If your technician needs a testing product, please direct the technician to call Rinehart Racing. This will mitigate the changes that you will damage the chrome plating on the heat shields or void the warranty of your new exhaust. Damage to the nickel plating associated with abuse, neglect, or misuse will void the warranty.

2.8 Discoloration and/or Blueing. Discoloration of exhaust product is exclusively caused by improper air/fuel ratio, long periods of idling, or slow speed travel under load. Please see a reputable dealer for the proper configuration for your application. Discoloration is not the result of a manufacturing defect, inadequate plating thickness, or plating processing. Rinehart Racing does not warrant against bluing or discoloration.

2.9 Precedence. This Warranty replaces all previous warranties, whether express, implied or oral. However, this warranty is in conjunction with, and does not void, exclude or preclude the Emissions Defects Warranty as set forth hereinafter.

2.10 Severability in the Event of Partial Invalidity. If any provision of this Warranty is determined, in whole or in part, to be unenforceable for any reason, the remainder of that provision and the remaining terms of this Warranty shall be considered severable and remain in effect.

2.11 Appropriate Law and Venue. The laws of the State of North Carolina shall govern the interpretation and enforcement of this Warranty, except that the terms of the Federal Arbitration Act shall govern the procedural aspects and enforcement of Section 2.11 hereof. Moreover, subject to Section 2.11, any proceeding to enforce, interpret or contest any term of this Warranty shall be brought and maintained in Buncombe County, North Carolina, as well as any proceeding to compel arbitration and/or and the prevailing party in any such proceeding shall be awarded its reasonable attorneys' fees and expenses. The term "prevailing party," in this context, shall mean the party who substantially obtains or defeats the relief sought as the case may be, whether by settlement, judgment, dismissal or abandonment by the other party of its claims and/or defenses.

2.12 Outside North America. If the Product is purchased or installed outside of North America, Rinehart Racing warrants the Product to be free from defects in materials and workmanship for a period of one (1) year from the date the product is purchased, subject to the limitations contained herein and as described in this limited warranty.

EMISSIONS DEFECTS WARRANTY

The following is an explanation of the emissions defects warranty on your new catalyst exhaust system or component. New aftermarket catalyst equipped exhaust components or systems must be designed, built, and equipped to meet stringent emissions standards. Rinehart Racing must warrant the aftermarket catalyst equipped exhaust components or systems to meet these applicable requirements for the period of time listed below, provided there has been no abuse, neglect, or improper modification of your engine.

EMISSIONS DEFECTS WARRANTY COVERAGE

If this Rinehart Racing aftermarket catalyst equipped exhaust is installed on a motorcycle within four years of the date that the motorcycle was first acquired by an ultimate purchaser, the Emissions Defects Warranty period is five (5) years or 30,000 kilometers (18,641 miles), whichever first occurs.

If this Rinehart Racing aftermarket catalyst equipped exhaust is installed on a motorcycle more than four years after the date that the motorcycle was first acquired by an ultimate purchaser, the emissions defects warranty period is three (3) years or 15,000 kilometers (9,321 miles), whichever first occurs.

If an emission-critical part on your exhaust has been deemed by Rinehart Racing to be defective, or has damaged an original part of the motorcycle, the part will be repaired or replaced by Rinehart Racing. This is your EMISSIONS DEFECTS WARRANTY.

WARRANTY VOID UPON

- 1) Abuse, misuse, improper installation, and/or modifications included, but not limited to:
 - a. the use of race fuel and/or fuel additives
 - b. leaded fuel
 - c. altered fuel injection or ignition systems
 - d. other alterations or modifications which affect exhaust emissions

NOTE: The Rinehart Racing Catalyzed Exhaust System includes a 3-way catalytic converter. The catalytic converter is susceptible to damage from substances including but not limited to lead, manganese, silicon, etc. Missing proof of purchase at time of warranty claim. Original purchase must provide proof of purchase (original receipt or invoice) and a warranty authorization number (RMA) issued by Rinehart Racing.

- 2) Finishes such as plating, painted surfaces with discoloration, or rust due to inclement weather conditions, exposure to salt or chemicals, or lack of maintenance by the customer are not covered.
- 3) **Failure to complete and return the included product registration card within 30 days of product installation. WARRANTY IS VOID IF NO PRODUCT REGISTRATION CARD IS ON FILE AT TIME OF CLAIM.**

WHAT IS COVERED BY THIS EMISSIONS DEFECTS WARRANTY?

The Emissions Defects Warranty covers the following “warranted parts” only:

- Original equipment of the exhaust system or component purchased (void if tampered with or not in the original equipment configuration)
- If used on the above: clamps, tubing, sealing gaskets, and mounting hardware.

WHAT IS NOT COVERED BY THIS EMISSIONS DEFECTS WARRANTY

The following items are not covered by the Rinehart Racing Emissions Defects Warranty:

- Malfunctions in any ‘warranted parts’ caused by any of the following: abuse, misuse, unapproved modification or alteration, tampering, disconnection, or improper maintenance.
- Malfunctions when used with an engine that has been rendered emission non-compliant.
- Discolorations or other cosmetic defects.
- Repairs improperly performed or replacements improperly installed.
- Use in competitive racing or related events.
- Damage resulting from accident, acts or nature, or other events beyond the control of Rinehart Racing.
- Repairs and services performed by anyone other than an authorized Rinehart Racing dealer (except in the case of emergency as defined above).
- Loss of time, inconvenience, loss of use of the engine and donor vehicle, towing of the vehicle, or commercial loss and/or consequential damages.

OWNER’S WARRANTY RESPONSIBILITIES

You are responsible for ensuring instructions on the included warranty card are followed and the requested information is returned to Rinehart Racing. Failure to provide this information could result in a delay of warranty coverage. Rinehart Racing recommends that you retain all receipts covering purchase and installation of your catalyst equipped exhaust component.

The included product registration card MUST be completed and returned to Rinehart Racing within 30 days of product installation. WARRANTY IS VOID IF NO PRODUCT REGISTRATION CARD IS ON FILE AT TIME OF CLAIM.

You are responsible for presenting your motorcycle to a Rinehart Racing dealer as soon as a problem exists. The warranty repairs should be completed in a reasonable amount of time, not to exceed 30 days.

You should be aware that Rinehart Racing may deny your warranty coverage if a part has failed due to abuse, neglect, or unapproved modifications to the exhaust or engine.

If you have questions regarding your warranty rights and responsibilities, you should contact Rinehart Racing, 110 Vista Boulevard, Arden, North Carolina, 28704 or the California Air Resources Board, P.O. Box 8001, 9528 Telstar Avenue, El Monte, California, 91734.

ADDITIONAL WARRANTY TERMS

The warranty period begins on the date the exhaust is delivered to the ultimate purchaser, or the date it is first installed.

Rinehart Racing recommends that you go only to an authorized Rinehart Racing dealer for repairs under this warranty. Authorized dealers have factory-trained mechanics and genuine Rinehart Racing parts. However, in the case of an “emergency” (as defined below), you could have repairs performed at any available service establishment or by the owner. An authorized Rinehart Racing dealer not being reasonably available within a reasonable time period (not to exceed 30 days from the time the motorcycle is initially presented to a Rinehart Racing dealer for repair) constitutes an emergency. Rinehart Racing will reimburse the owner for such repairs, including diagnosis, only if it is established that the repairs are covered under this emissions warranty. Rinehart Racing’s parts reimbursement, however, will not exceed our suggested retail price for all warranted parts replaced and our labor reimbursement will be limited to our recommended time allowances for emission system repairs at the geographically appropriate hourly labor rate. To obtain reimbursement from Rinehart Racing for such emergency repairs, you must keep all failed parts and original receipts, so you can present them to an authorized Rinehart Racing dealer for his inspection. Rinehart Racing recommends that you bring your vehicle to an authorized dealer for inspection to ensure that the emergency repairs were done properly.

Rinehart Racing 4” Catalyst Mufflers & MotoPro45 Catalyst Mufflers for Slimline Duals Exhaust System Packages for 2017-2019 Harley-Davidson Touring Models

The use of non-Rinehart Racing replacement or approved aftermarket parts does not invalidate the existing warranty, if any, on this or other Rinehart Racing components unless the non-Rinehart Racing parts cause damage to warranted parts or result in the creation of an emission non-compliant vehicle. However, Rinehart Racing ASSUMES NO LIABILITY UNDER THIS WARRANTY WITH RESPECT TO ANY PARTS WHICH ARE NOT GENUINE RINEHART RACING PARTS, unless genuine Rinehart Racing parts cause damage to non-genuine Rinehart Racing parts.

Cleaning:

Never use harsh chemicals or any type of abrasive material to clean the chrome or ceramic coating on this exhaust system. We recommend using a soft nonabrasive cloth with a mild detergent.

Proper Use of Product as Designed, Intended and Manufactured by Manufacturer:

The Limited Warranty as described herein applies only when the Rinehart Racing® system is installed correctly and used for its intended purpose. Warranty does not apply when damage is the result of normal wear and tear, improper use, neglect or incorrect engine calibration or tuning. Rinehart Racing mufflers are designed to be installed and used as originally assembled by the manufacturer. Modifying or removing the Rinehart Racing baffle shall void the warranty, both the limited warranty and the emissions defect warranty. In addition, tampering with, modifying or removing the baffle is prohibited and in violation of tampering regulations under the laws of the State of California. See Warranty Notice above for more information. Rinehart Racing Mufflers are designed and intended for use ONLY on Rinehart Racing head pipes. Use and installation of Rinehart Racing Mufflers on any alternate aftermarket head pipe is strictly prohibited and is likely to result in discoloration which is not a warrantable item. Improper use of Rinehart Racing product, including but not limited to head pipes and mufflers, is strictly prohibited and will void the Limited Warranty and Emissions Defects Warranty as described herein. See Warranty Notices above for more information.

INSTALLATION INSTRUCTIONS

Provided Hardware

- | | |
|--|--|
| 1 – (35-00038) - 3/8" Carriage Bolt | 1-(29-00028B) – ½" Front Floorboard Spacer |
| 1 – (35-00039) - 3/8" Nut | 1-(29-00300B) – ½" Front Floorboard Peg Spacer |
| 2 – (20-00003) - Exhaust gasket | 1-(35-00308) – 3/8"-16 x 3.25" SHCS |
| 2 – (35-00083BA) - 18mm bung plug | 1-(35-00306) – 3/8"-16 x 1.75" SHCS |
| 2 – (35-00085BA) - 12mm bung plug | 1-(29-00303) –1/4" Spacer |
| 1 – (31C150KCS0Z) - 5/16-18 X 1-1/2 SHCS Zinc Plated | 1- (31NWSA0Z) - 5/16 SA Flat Washer Zinc |
| 1—(31NLOC0Z) - 5/16 Split Lock Washer Zinc | |
| 1 – (Slimline Bracket) - Cross Under Bracket | |

Before beginning the installation process, make sure to read and follow the "SAFE INSTALLATION AND OPERATION RULES" listed on page 1. Failure to follow proper safety rules may result in damage to the motorcycle and/or serious bodily injury.

- 1) Remove left and right saddlebags.
- 2) Remove right side front floorboard. **(Figure 1)**
- 3) Remove mufflers and save for later installation.
- 4) Loosen the exhaust clamp and remove the support clamp for the left exhaust pipe. The support clamp is located under the transmission pan. **(Figure 2)**
- 5) Remove the cross under exhaust pipe and stock mounting bracket. Install the new mounting bracket using the OEM bolts. **(Figure 3)**
- 6) Remove the carriage bolt and nut from the transmission support tab located on the right side of the motorcycle. Save for installation of new header.
- 7) Loosen and remove the exhaust flange nuts and remove the OEM exhaust. On 2017 and later bikes remove the stud from the side of the motor case.

- 8) Carefully remove the O2 sensors from the OEM exhaust. Remember to note which sensor came from which header. Gray wire sensor is for the front header. Black wire sensor is for the rear header.
- 9) Carefully remove OEM exhaust flanges and retaining rings. Do not damage or distort the retaining rings. If possible use snap ring pliers. Replace damaged retaining rings.
- 10) Slide the exhaust flange and retainer rings onto the RINEHART exhaust headers. The machined recess should face the retainer ring.
- 11) Remove the OEM exhaust gaskets from the cylinder heads. It may be necessary to pry the exhaust gaskets from the head using a scribe or a small screwdriver. Do not damage the cylinder head!
- 12) Install supplied exhaust gaskets; make sure to seat the new gaskets into the cylinder head. Failure to use provided gaskets WILL alter the fitment of the system.
- 13) If applicable, install both OEM O2 sensors into the front and rear Rinehart pipes. Torque 25 ft. lbs. Apply anti-seize (anti-seize is not provided) on O2 sensor threads before installing. (Do not get any anti-seize on O2 sensor tips.) Reconnect O2 sensor cables back into appropriate terminals.
- 14) Install the Rinehart Slimline header. Place in the front cylinder head first. It may be necessary to pull rearward slightly on the header to get it in the rear cylinder head. Finger-tighten the exhaust head flange nuts.
- 15) For the 2016 and back bikes reinstall the carriage bolt and nut through the P-clamp and transmission support bracket located on the right side of the motorcycle just below the transmission cover using the OEM 3/8 carriage bolt and nut. Both flanges of the P-clamp should be located under the stock bracket. For the 2017 and up bikes install the 1/4" spacer behind the pre-installed mounting bracket. Using the 5/16-18 bolt, flat and lock washer, secure the bracket using the mounting hole that the stud was removed earlier.
- 16) Install the barrel clamp and bracket on the cross under tube, slide fully onto main header and snug the barrel clamp. Insert the supplied carriage bolt through both brackets so the threads face the rear tire and install nut. **(Figure 4)**
- 17) With everything finger tight, install mufflers on the header and rear mounting brackets. Check to verify the muffler clamps are flush with the inlet to ensure a proper seal on the header.
- 18) IN THIS ORDER!!! Tighten the cylinder head exhaust flange nuts. Torque to 10-12ft lbs. Tighten barrel clamp on cross under tube. Tighten both carriage bolts and nuts to 15-20 lbs-ft. Tighten muffler clamps and rear mounting hardware on mufflers. Torque 8-10ft lbs.
- 19) Install right hand floor board using 3/8"-16x 3.25" bolt, OEM nut, and 1/2" round spacer for the front (place between frame and floorboard), and 3/8 – 16 x 1.75" and peg spacer for the rear bolt.
- 20) After the installation of the exhaust system, make sure to use an appropriate cleaner and microfiber cloth and wipe the surface clean before starting. Any marks left on the exhaust system will be permanently etched into the surface of the system if left on during the first heat cycle.



FIGURE 1



FIGURE 2



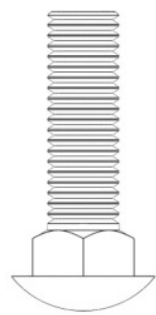
FIGURE 3



FIGURE 4



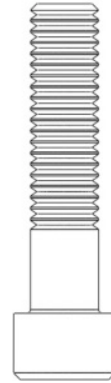
Exhaust Gasket
x 2
20-00003



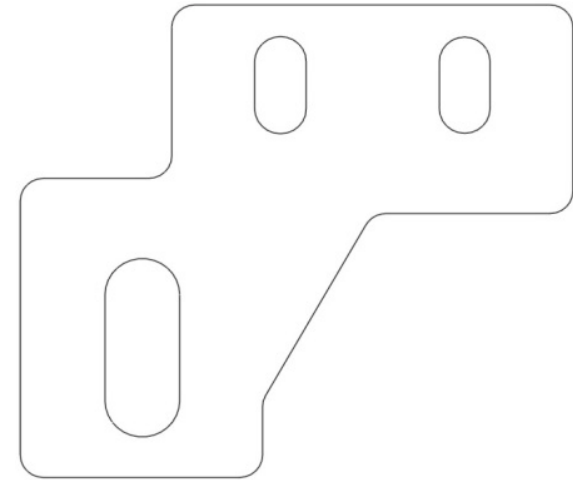
3/8" x 1-1/4"
Carriage Bolt
x 1
35-00038



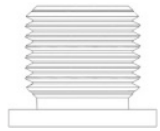
3/8" x 3-1/4"
Socket Head Cap Screw
x 1
35-00308



3/8" x 1-3/4"
Socket Head Cap Screw
x 1
35-00306



Slimline Crossunder Bracket
x 1



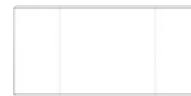
18 mm
O2 Bung Plug
x 2
35-00084BA



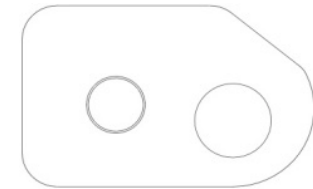
12 mm
O2 Bung Plug
x 2
35-00085BA



3/8"
Serrated Flange Nut
x 1
35-00039



1/2"
Front Floorboard Spacer
x 1
29-00028B



1/2"
Front Floorboard Peg Spacer
x 1
29-00300B